

Department of Industrial and Systems Engineering UNIVERSITY OF WISCONSIN-MADISON



Graduate Program Handbook Fall 2025



Welcome, new and returning graduate students!

The faculty and staff of the Department of Industrial and Systems Engineering at the University of Wisconsin-Madison are delighted that you have joined us for your graduate studies! Our department is internationally known for its expertise in human factors engineering, health systems engineering, manufacturing and production systems, and decision sciences and operations research.

Graduate school is a remarkable time in an engineer's life. Graduate school provides an opportunity for you to deepen your skills and expand your knowledge about industrial engineering, and how it can be applied to improve both industry and the broader society. You're joining a great department at a great university, and I am confident that you will find lots of opportunities for personal and professional growth here. The faculty, staff, and other students are all happy to help you learn what you want to learn!

Graduate school is a time of increasingly self-directed learning – both inside and outside the classroom. So, take advantage of your time here to meet our faculty members in person, attend our research seminars (on Friday afternoons at 12:00pm), explore the work being done in other departments, and generally create a vibrant learning experience that will help you launch the next phase of your life.

Your first stop on the way should be the Graduate Student Services Center (Wendt Commons First Floor). If you occasionally manage to come up with a question for which they don't know the answer, they will at least always know how to GET the answer for you! In addition, Prof. Kaibo Liu (Room 3017) is the associate chair of the department for graduate studies; he can assist you with any academic issues. Each graduate student also has an adviser – please make sure to introduce yourself to your advisor by the third week of the semester. Finally, as department chair, I hold regular office hours for students in my office (Room 3107). You can stop by without an appointment during office hours, or feel free to make an appointment to meet with me at some other time.

Good luck.

Shiyu Zhou

David H. Gustafson Department Chair and Professor

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ISyE Faculty Directory











Alberto Del Pia













Department of Industrial and Systems Engineering UNIVERSITY OF WISCONSIN-MADISON

Faculty and Instructional Staff 2025-2026





































Research Groups









ISyE Staff Directory

Dave Kantor

Department Administrator

Contact me for:

- General questions regarding the department
- ME building spaces maintenance and issues
- Hiring staff or inviting visiting scholars
- Questions about the airspeed velocity of an unladen swallow

ME 3107 | (608) 263-3214 | dkantor@wisc.edu

Kelly Petersen

Main Office Manager

Contact me for:

- Conference room reservations and conference call set ups
- Keys and building access
- E-reimbursement, travel reservations, fleet rentals
- Mail
- Parking permits/validations

ME 3107 (608) 262-2686 | kmpetersen2@wisc.edu

Jane Feller

Communications Specialist

Contact me for:

- Research accomplishments and faculty awards
- Social media and website administration
- Public relations
- Alumni letters and communications
- Scholarship management

ME 3107 | (608) 890-1617 | jfeller3@wisc.edu

Casandra Zimmerman

Academic Communications Specialist

Contact me for:

- Social media and website administration
- Event management/public relations
- Student accomplishments and awards
- Student Organizations

ME 3107 | (608) 890-1617 | cmzimmerman2@wisc.edu



Cody Legreid

Accountant

Contact me for:

- Department financial policies and procedures
- E-reimbursement
- P-Card use
- Budget management
- Scholarship management

ME 3107 | (608) 265-5941 | clegreid@wisc.edu



Shalini Shatadal

Research Administrator

Contact me for:

- Research fund administration
- Pre- and post-award management of research grants
- WISPER records
- Research proposal editing

ME 3107 | (608) 265-5474 | sshatadal@wisc.edu



Gamze Randolph

Research Administrator

Contact me for:

- Research fund administration
- Pre- and post-award management of research grants
- WISPER records
- Research proposal editing

ME 3107 | (608) 890-1463 | grandolph@wisc.edu



Jenna Moss

Assistant Department Administrator

Contact me for:

- RA/TA/PA salary, benefits, and appointment letters
- I-9 employment verification
- Speak Test information
- Benefit advisement
- Visa processing and tracking
- Summer support hiring
- Department Metrics

ME 3107 | (608) 890-1463 | jamoss@wisc.edu



Pam Peterson

Academic Advisor Director

Contact me for:

- Graduate student services
- Graduate school resource and policy information
- Warrant processing
- Campus resources
- Research enrollment assistance

Wendt Commons First Floor 133 | (608) 263-4025 prpeterson@wisc.edu



Sinan Tas

Advisor and Director, Accelerated Master's Program

Accelerated/Course Program students should contact me for:

- Degree requirements
- Available Courses
- Prerequisites
- Career opportunities

ME 3107 | (608) 263-0379 | tas@wisc.edu

Arriving on UW Campus

New graduate student checklist: What do I do now?

Adapted from grad.wisc.edu/new-students

Visit the CoE Graduate Student Services Office

Visit the Graduate Student Services Office (Wendt Commons First Floor) and meet your ISyE graduate program coordinator in Room 133. Although the Graduate Student Services Office is there to assist you, remember it is your responsibility to be aware of graduate policies and deadlines.

Activate your UW-Madison NetID

Your NetID is your unique credential for accessing your online services at UW–Madison. You will need your 10-digit campus ID number. Follow these instructions to activate your NetID.

Enroll in classes

Students enroll at my.wisc.edu. You will need your NetID and password to access the MyUW portal. (See Activate your UW-Madison NetID for more information). You can enroll at any time after your Enrollment Appointment Time until each session's class-add deadline. You can find your enrollment time in your Student Center at my.wisc.edu. To enroll after the add period for a course, you will need department and/or dean's permission. You will not be able to obtain your student ID card (Wiscard) until you enroll. For ISyE Course enrollment assistance, please contact enrollment@ie.wisc.edu.

Pay your tuition and fees

Check your student account invoice for amount due and payment deadlines. Pay your fees and tuition, if applicable, at the Bursar's Office. If you do not receive an invoice, contact the Bursar's Office. Failure to receive an invoice will not be accepted as a reason for failure to comply with payment deadlines. Bursars Office: 333 East Campus Mall #10501, (608) 262-3611

Get your student ID card (Wiscard)

Get your student ID card at the Wiscard Office. You must be enrolled and have valid identification (such as a valid driver's license, passport, or state ID) to get your Wiscard. *Prerequisite: You must be enrolled.*Union South, 1308 W Dayton Street, room 149, (608) 262-3258, M-F 8:30 am – 5:00 p

Locate your WiscMail account and "wisc.edu" address

When you have activated your NetID, log on to my.wisc.edu and open the "Email" tile. WiscMail is UW-Madison's centrally supported email service, providing a reliable service with built-in spam filtering and other features. All campus units, including Industrial Engineering, the Graduate School, the Office of the Registrar (your student records), and the Bursar's Office (tuition and fees) will only send mail to your official wisc.edu address. Read your email often.

WiscMail is based on a version of Microsoft Office 365/Outlook. Students can set up an Outlook app on your computer and configure other email clients—including mobile devices—to read and send from your wisc.edu account.

Activate your CAE account

CAE accounts are automatically established for all engineering students from their current registration information, and they allow for a variety of services at no charge to the student. Your CAE account will give you access to the many computing resources in the College of Engineering including the CAE Windows and Linux workstations, and access to software. Your CAE account is available as long as you are enrolled in an engineering course, until your graduation. On the CAE site, clicking the "Activate your CAE account" link or emailing the CAE Helpdesk at helpdesk@cae.wisc.edu.

Prerequisite: You must have had your Wiscard for about a week.

Update your mailing address and phone number

Your student record can include both a Home address (your current address while a student) and a Mailing address (often a student's more permanent address, or that of a parent/family member). Before you graduate, you can also add a Diploma address for receiving that mailed document. Update these addresses and your current phone number through Student Center. To update your address before you enroll for your first semester, contact the Graduate Admissions Office at (608) 262-2433.

Order your free Madison Metro bus pass

As a UW student, you order a bus pass at no charge online through Transportation Services at the beginning of the fall and spring semesters. Visit the Transportation Services webpage for more information and the online order form. *Prerequisite: You must be enrolled for classes and have paid the student transportation segregated fee for the current or upcoming semester at UW-Madison.*

Complete the online sexual violence prevention program

This is required for all new graduate students. The course will be activated in late summer and graduate students will be officially notified of their responsibility to complete the training at that time.

Housing

There are many different housing options in Madison. The key to finding a good fit is to start looking for housing early. You can start your search on the <u>Campus Area Housing</u>. They have updated housing listings as well as information about tenants' rights, university apartments, and finding housing in Madison. <u>UW Rental Resource Guide</u>

You may also want to try <u>University Housing-Apartments</u> and <u>Madison Campus and Downtown Living</u>, as they both list many campus area apartments. Almost all leases are 12 months long and start on August 15th. If you have any questions or concerns about your housing, please call the <u>Tenant Resource Center</u> at (608) 257-0006.

City of Madison

The city of Madison has a lot to offer its residents and visitors with hundreds of restaurants, musical events and cultural activities. The websites below will help you learn more about the city and things to do year-round.

- Visit Madison
- Madison throughout the seasons
- Isthmus
- UW-Madison Events Calendar
- Madison.com

Academics

Important Websites

Academic Calendar	http://www.secfac.wisc.edu/academic-calendar.htm
CAE (Computer Aided Eng)	http://www.cae.wisc.edu/
Deadlines At a Glance	https://registrar.wisc.edu/dates/
DoIT (Division of Info Tech)	http://it.wisc.edu/
Engineering Career Services	https://engineering.wisc.edu/student-services/career-services/
Engineering Student Center	https://intranet.engineering.wisc.edu/undergraduate-students/engineering-
	student-center/
Grad School Academic Guidelines	http://grad.wisc.edu/acadpolicy/
Graduate School Forms	https://grad.wisc.edu/documents/forms/
Inclusive, Equity and Div in Eng	https://intranet.engineering.wisc.edu/inclusion-equity-and-diversity-in-engineering/
International Student Services	http://iss.wisc.edu/
ISyE Department Website	https://intranet.engineering.wisc.edu/industrial-systems-engineering/
McBurney Disability Center	http://mcburney.wisc.edu/
University Health Services	http://www.uhs.wisc.edu/
Wait List Demo	https://kb.wisc.edu/page.php?id=15644
UW Inclusive Excellence Office	https://diversity.wisc.edu/
UW Libraries	https://www.library.wisc.edu/
Writing Center	http://writing.wisc.edu/

Important Dates

Each semester, you can find a copy of the Academic Calendar, as well as important deadlines through the wisc.edu homepage. The Graduate Student Services Center will email students at the beginning of each semester to remind students of the deadlines. However, as a student, it is YOUR responsibility to be aware of and meet all deadlines. Please see the Academic Calendar for more information and you can find each semester's deadlines at the Registrar's Deadlines At A Glance.

Student Records in UW Box System

All ISyE students will be given an ISyE online box folder through the <u>University of Wisconsin-Madison Box system</u>. Students will login using their netID and password. Each student will have a folder in their Box where they can upload the required documents and receive faculty approval and signatures. Students will be emailed with instructions on how to access their ISyE Student Box folder within the first week of the semester.

Advising

Per Graduate School Advisor policy, **every graduate student at UW Madison MUST have a faculty advisor.** A faculty advisor provides the graduate student with academic guidance regarding their course selection and research oversight in their thesis or project. Graduate students should always seek advice from their advisor and other faculty in their interest area prior to enrolling for courses.

All ISyE graduate students are also assigned to Pam Peterson (the ISyE Graduate Coordinator) for additional program assistance (i.e. Graduate School policy and procedure information, campus resources and overall general program support etc...) If you have questions, please stop by her office in the CoE Graduate Services Center in Wendt Commons in Room 133 or email her at preterson@wisc.edu. Students, please include your Campus ID # and program information with all communications with ISyE faculty and staff (including the Graduate Coordinator).

Faculty Advisor Selection

Many PhD students are assigned to a faculty advisor when they are admitted to the program, based on a match between their research interests and those of the assigned advisor. Some PhD students are not initially matched to a faculty advisor for their research when admitted. Such students are advised by the Associate Chair for graduate studies in their first year. During their first year, these students explore research possibilities with different faculty in the department and choose a faculty advisor by the end of the first year.

MS Research students are assigned to a faculty advisor according to their research interests when admitted.

MS students in the MS Professional Programs are advised by the MS Course Director (Prof. Sinan Tas tas@wisc.edu).

Changing Research Faculty Advisors

Changing advisors during the research option MS or PhD program may be necessary due to changes in a student's interests. To change advisors, a student should first obtain approval from their potential new advisor. The change is then implemented by the student submitting a request to change their advisor to the Graduate Coordinator. (Pam Peterson at preterson@wisc.edu). When you email the Graduate Coordinator, please be sure to include your previous advisor, new advisor as well as your student ID #. Students planning to change their advisor are expected to inform the current advisor of their pending departure with as much advance notice as possible. If a student's change of advisor is a result of hostile or intimidating behavior, bias, harassment, etc., from their current advisor, the Associate Chair for graduate studies will work with the student to assure their funded appointment is adequate for the student to make progress in their degree, in particular with preference for a research assistant appointment over a teaching assistant appointment.

Changing Focus Areas

Changing focus areas during the graduate program may be necessary due to changes in a student's interests. Students should understand that switching focus areas may result in the student having to take more courses to meet the requirements of their new focus area. To change focus areas, students need to secure a new faculty advisor within the new focus area. It is the student's responsibility to find a new advisor before they can change focus areas. Once a student has secured a faculty advisor, the student should request that the advisor email the Graduate Coordinator to confirm their willingness to advise the student. The Graduate Coordinator will then update the student's focus area and advisor. Students should start working with a new PhD Plan of Study form that fits their new focus area and with their faculty advisor toward completion of the program requirements.

MS Students Applying to PhD Program

Students enrolled in an MS degree program may apply to the PhD program by the following steps.

- 1) Students must complete a <u>Add/Change/Discontinue Program Request</u> with the Graduate School as well as submission of a Statement of Purpose, Current Resume, GRE Exam Scores and 3 letters of recommendation to the Graduate Coordinator for the program change/add request review.
- 2) An MS student's application to the PhD program is helped significantly if they have first found a faculty advisor who agrees to advise them throughout their PhD program. In this case, the faculty advisor should send an email to the Graduate Coordinator to notify them of their intent to advise the student.
- 3) The student file is then reviewed by the graduate admissions committee to decide on admission to the PhD program. If admitted, the student's <u>change of degree level</u> is approved, and the Graduate Student Coordinator will notify the Graduate School and will email confirmation to the student.
- 4) **International students** must also inform the International Student Services Office as soon as they decide to change their degree level by filling out the Change of Education Level Request in the ISS Terra Dotta system.

Withdrawing from UW-Madison

For students needing to withdraw from their graduate program in ISyE:

- 1) Please visit the Office of the Registrar's <u>website</u> for instructions for withdrawing from UW-Madison. Please read the Impacts of Withdrawing section.
- 2) Please inform your ISyE faculty advisor and Graduate Coordinator of your plans (either by email or in person).

A student is considered enrolled at UW-Madison if, starting on the first day of that term, they are enrolled in at least one course, even if tuition has not been paid or the student has yet to attend class. If you decide not to attend UW-Madison for a term, and you have already enrolled in at least one course, you will either CANCEL your enrollment or WITHDRAW from the University depending on timing.

Class Registration and Credit Load

Registering for Independent Study (ISyE 699/999)

Or Research / Thesis Credits (ISyE 790/890/990)

To register for independent study or research /thesis credits students should consult with their research/ faculty advisor prior to enrollment for information on credit #'s, expectations of coursework, etc. Independent study credits (699 or 999) are graded with a letter grade (A-F) and are weighted with the student's GPA. Research credits (790, 890, 990) can only be graded as P (Progress), S (Satisfactory), U (Unsatisfactory). Research credits are not weighed into a student's GPA.

Advanced Independent Study (ISyE 699/999) – short term/ one semester project work: Graduate students should email the Graduate Coordinator (preterson@wisc.edu) with their campus ID# and faculty name information for permission for enrollment.

Research / Thesis Credit (IE 790 / 890 / 990) – long term / multiple ongoing research: ISyE graduate students can enroll directly through their MyUW student center under the appropriate course # pending their degree program.

Non-ISyE Graduate students should complete the <u>Non-ISyE Graduate Students – Ind Study/Research/Thesis Course</u> Authorization (IE 699, IE 790, IE 890, and IE 990).

Research and Independent Study Courses: Independent study credits (699 or 999) are graded with a letter grade (A-F) and are weighted with the student's GPA. Research credits (790, 890, 990) can only be graded as P (Progress), S (Satisfactory), U (Unsatisfactory). Research credits are not weighted into a student's GPA.

As a general guideline,

- MS students should register for Independent Study 699 or Masters Research 790
- PhD pre-dissertators should register for Independent Study 699 or Pre-dissertator Research 890
- PhD dissertators should register for Advanced Independent Study 999 or Dissertator Research 990

However, the student needs to discuss with his/her advisor to decide which course to register for among 699, 790, 890, or 990.

*Please review the Important Enrollment Dates and Deadlines on the Office of the Registrar's website. *

Change of credits: If a student decides they need to change the number of credits for their research or independent study course and **the Add Deadline has** *not* **passed**, students can change the number of credits thru their MyUW Student Center through a <u>Course Change Request</u>.

Late Course Enrollment/Late Course Change/Late Drop

After the Add Deadline *has* passed, an appeal with the Graduate School and Registers office needs to be made. Please visit Late Enrollment Instructions for further information.

Registering for a Closed Course

If you try to enroll for a course but receive an error message, please read the error message carefully. If the error message indicates that the course has reached capacity, please add yourself to the course waitlist if one is available. If the error message indicates the course pre-requisites have not been met, please email the instructor for permission to enroll or if the error message indicates that instructor consent is required, please email the instructor directly. For other ISyE course enrollment assistance, please email enrollment@ie.wisc.edu.

Enrollment Overview

Grading

Per ISyE Policy IEP 11.1, graduate students who receive a grade of C or lower will not be allowed to use that course for their graduate program. Students must receive a BC or higher in any course they plan to use toward their graduate program.

Satisfactory Progress

Please be sure to check the Department policy for <u>Satisfactory Academic Progress</u> as well as the <u>Graduate School's</u> policies on satisfactory progress. Continuation in the Graduate School is at the discretion of a student's program, the Graduate School, and a student's faculty advisor. The Graduate School sets minimum standards that all graduate students in the university must meet. Many departments and programs have additional requirements that exceed these Graduate School minimum requirements. The definition of satisfactory progress varies by program. The <u>Graduate Guide</u> includes the Graduate School's minimum degree requirements and each program's minimum criteria for satisfactory progress.

The Graduate School requires that students maintain a minimum graduate GPA of 3.00 in all graduate-level work (300 or above, excluding research, audit, credit/no credit, and pass/fail courses) taken as a graduate student unless probationary admission conditions require higher grades. The Graduate School also considers Incomplete (I) grades to be unsatisfactory if they are not removed during the next fall or spring semester in which a student is enrolled; however, the instructor may impose an earlier deadline. Students must be in good academic standing with the Graduate School, their program, and their advisor. The Graduate School regularly reviews the record of any student who received grades of BC, C, D, F, or I in graduate-level courses (300 or above), or grades of U in research and thesis. This review could result in academic probation with a hold on future enrollment, and the student may be suspended from graduate studies.

In addition to the above minimum requirements, satisfactory academic progress in the ISyE department requires the following:

- All ISyE graduate students are expected to meet academic and professional conduct standards, as described in the ISyE Graduate Handbook. This includes behaving professionally, contributing to a positive work culture, and conducting research ethically.
- Graduate students with assistantship positions (RA, TA, or PA) must adequately perform the responsibilities associated with their position, as determined by the supervisor.
- PhD students must complete the qualifying exam, preliminary exam, and final defense of their dissertation within the required time limits (see the section on PhD requirements for what the time limits are).
- PhD students must make consistent progress toward their dissertation as appropriate for their year of study.
 Satisfactory research progress is determined by the PhD student's faculty advisor. Unsatisfactory progress will be communicated to the student by their faculty advisor and can be done via the annual assessment of student progress, by giving the student a grade of "U" in a research course, or by a written letter.

If a graduate student fails to make satisfactory progress as defined by any of the criteria outlined above, a review committee will be formed to review the circumstances and the student's record, taking input from the student. The review committee will consist of the student's faculty advisor and two other ISyE faculty members appointed by the Associate Chair for Graduate Affairs. The review committee will review the students' record and determine if the student is making satisfactory progress. If the student is determined to not be making satisfactory progress, the committee will also decide whether the student should be placed on departmental probation, or in exceptional cases (such as severe professional misconduct or academic misconduct as determined in accordance with UWS 14.04) be immediately removed from the ISyE graduate program and have their funding guarantee removed. If a student is put on probation, the committee will provide the student with a written explanation of what is required for the probation to be lifted, and in what timeframe the requirements must be met. Failure to qualify for removal from probation after being on probation for a semester will lead to the removal of a PhD student's funding guarantee (see policy 12.1).

A student may be placed on probation or suspended from the Graduate School for low grades or for failing to resolve an incomplete in a timely fashion. In special cases, the Graduate School permits students who do not meet these minimum standards to continue probation upon recommendation and support of their advisor. Most programs require satisfactory progress to continue funding support.

Probationary Status

A committee will review each student's probationary status at the end of each regular semester to determine if they are qualified for removal. The committee will include the Associate Chair for Graduate Affairs and two other faculty members appointed by the Associate Chair.

A student will be removed from probationary status under the following conditions:

- A student admitted on probation will be removed from probation if that student: Has met all special conditions specified in the letter from the Graduate School notifying the student of admission AND is making satisfactory academic progress according to the Department's current policy.
- Continuing students on probation will be removed from probation if they are deemed to be making satisfactory academic progress by current Department policy.
- A student may be removed from probation by special action of the Academic Affairs cluster.

A student placed on probation who fails to qualify for removal of probation at the next review of their probationary status will not be permitted to continue graduate studies in the ISyE Department, and any funding guarantee made to the student by the department is removed.

Please note that any student who is on probation will not be able to enroll for the following semester until their final grades are submitted and the Graduate School has verified that they are making satisfactory progress. For any questions relating to probation, please contact the Director of Academic Services at (608) 262-9209.

Minimum Credit Requirements

Fall and Spring: The minimum credit load to be considered a graduate student at UW-Madison is 2 graduate-level credits (300 or above). A student taking 2-6 credits during the Fall or Spring semester is considered a part-time graduate student. A student taking 8-15 credits during the Fall or Spring semester is considered a full-time graduate student.

The maximum credit load for fall and spring semester is 15 graduate-level credits. Both F-1 and J-1 student visa regulations require students to be enrolled full-time each fall and spring semester. For more information on the Graduate School policies regarding enrollment, please visit the Enrollment Requirements page.

Summer: Enrollment for summer is not required for Graduate Students unless it is their final semester of their degree program, or they are planning to finish during the Fall Window period per Graduate School policy. (MS 2 cr required, PhD 3 cr required).

For International students: Summer enrollment for F-1 and J-1 international students is not required unless it is the initial summer of their program indicated on your I-20/DS-2019 or the final semester of study for their degree program (MS 2 cr, PhD 3 cr required).

Enrollment is also required for any student being paid and serving as a PA, RA or TA during the summer session. (See chart below).

PhD Dissertators: PhD Dissertator status, which is granted once a PhD student has passed their Preliminary Exam, allows a student to enroll for only 3 credits and be considered a full-time student. Dissertators also pay a lower tuition than other graduate students. To maintain dissertator status, students must enroll for no more than and no less than 3 credits each semester. For more information on dissertator status, please see the Graduate Schools <u>Academic Policy on Dissertation Status</u>.

The Department does not require full-time status for all graduate appointments

Minimum Credit Requirements for Full-Time Enrollment			
Categories	Fall/Spring Minimum Credit Load	Summer Minimum Credit Load	
		3 credits*	
Dissertators	tators 3 credits	*required if receiving summer degree or if	
		graduate assistant, trainee, or fellow	
BA New discounts to a	8 credits	2 credits*	
RA, Non-dissertator		All RAs are required to enroll in 2 credits over the	
		summer	
TA/Lecturer (SA) 33 %,	6 credits	2 credits*	
non-dissertator	0 0.000	*required only if receiving summer degree	
TA/Lecturer (SA) 50%,	4 credits	2 credits*	
non-dissertator	4 cicuits	*required only if receiving summer degree	
PA 33%, non-dissertator	or 6 credits	2 credits*	
PA 33%, Holl-dissel tatol		*required only if receiving summer degree	
DA FOO/ man discoutation	4 credits	2 credits*	
PA 50%, non-dissertator		*required only if receiving summer degree	
Fallers was discontated	8 credits	2 credits for 12-month appointments.	
Fellow, non-dissertator	o credits	Not required for 9-month appointments.	
Trainee, non-dissertator	8 credits	2 credits	
		4 credits*	
International student (F-	8 credits	*when summer is admit semester	
1/J-1 visa), non-dissertator		2 credits*	
	*required only if receiving summer degree		
If none of the above, full- time enrollment is:	8 credits	4 credits	

Please note that pass/fail courses, audited courses, or courses below the 300 level do not count towards minimum or maximum requirements. They are in essence counted as zero credits.

Credit Overload / Reduced Course Load

To enroll for more than the maximum credit load (15 credits) in any given semester, students must submit a <u>Credit Overload Request form</u>. This form must be approved and signed by your faculty advisor and turned into the Graduate School at 217 Bascom Hall. The Graduate School will look closely at the rationale for the request, and if the request is approved, the student will be notified that they can add the course. *This request MUST be submitted at least one week before the Add deadline.*

For International students: F-1 and J-1 international students are required to maintain full-time enrollment (8 credits) each fall and spring semester. To request an exception to this policy if needed (i.e., final semester or degree program, medical concerns, etc.), international students can complete a Reduced Course Load (RCL) form in the ISS Terra Dotta system.

Transferring Graduate Credits from other Institutions/ Prior Coursework

The Graduate School's minimum credit requirement for graduation can ONLY be satisfied with graduate-level courses taken as a graduate student at UW-Madison. Per UW Policy 1216, the Graduate School does NOT transfer credits. A student's program may decide to accept coursework completed outside of the student's graduate career at UW-Madison when those courses are rigorous and meet the expectations of a graduate work for the degree.

Coursework earned five or more years prior to admission to a master's degree or coursework earned ten or more years prior to admission to a doctoral degree is not allowed to satisfy Graduate School minimum credit requirements. If a student would like to use credits from a previous institution, during the first semester of their program, students should first discuss this with their advisor for approval. If the advisor approves, students should complete a Course Substitution Form/ Course Transfer Request for each course along with a brief course description and syllabus for each course for review and approval by the department.

The Graduate School's minimum credit requirement to take residence at UW Madison for a Master's degree is 16 credits and 32 credits for a PhD. The ISyE Department will allow students to transfer courses and if approved by the department, they will appear on their UW-Madison transcript. Graduate students who have been absent for five or more years will lose all degree credits earned before their absence.

The ISyE Department will allow Graduate Students to use up to 9 credits from a previous **graduate** institution toward the MS Course program upon the approval of his/her academic advisor and the associate chair for graduate students. **(MS Research and PhD students can transfer more than 9 credits of course if approved by their advisor and the associate chair for graduate students).**

Note: Graduate students in the MS Course program with a UW Madison's bachelor's degree may count up to 6 credits of approved **undergraduate** course work toward the MS Course program also upon approval of the department and if graduate program is started within 5 years of receiving their bachelor's degree.

However, there are a few exceptions:

- Courses taken as an undergraduate student *cannot* be used toward the ISyE Graduate Program, except to fulfill the Breadth Requirement for PhD students. **Exception: UW-Madison undergraduate students doing the MS Professional degree program can count their courses toward the Breadth Requirement for a PhD.
- For University Special Students, please view the University Special Student Credit Conversion policy.

TO REQUEST PRIOR COURSEWORK TO BE REVIEWED:

If a student would like to use credits from a previous institution, during the first semester of their program, students should first discuss this with their advisor for approval. If the advisor approves, students should complete a Course Transfer Request for each course along with a brief course description and syllabus for each course for review and approval by the department.

Teaching Evaluations (HelioCampus System)

At the end of each semester, instructors are required to evaluate their teaching abilities through a teaching evaluation done through the University of Wisconsin-Madison's **HelioCampus Assessment platform.** These evaluations are extremely useful to the department in evaluating faculty, determining tenure, and improving the department's curriculum. We strongly encourage students to complete the evaluations online. This is one of the most useful tools the department must evaluate the teaching capabilities of their instructors, and we rely heavily on students' feedback.

UW Learning Assessment Information

Graduate Student Campus Resources

Graduate School Office

Location: 217 Bascom Hall, 500 Lincoln Drive

Tel: (608) 262-2433

Email: gsacserv@grad.wisc.edu

The <u>Graduate School</u> office and website have dozens of resources for current and prospective students. Please visit the Graduate School page for <u>Current Students</u> to get information on topics including:

- Academics Policies and Procedures
- Degree Completion Information
- <u>Diversity</u>
- Funding and Financial Aid Resources
- <u>Professional Development</u>

International Student Services (ISS)

Location: 702 Langdon Street, Suite 130

Tel: (608) 262-2044

Email: iss@studentlife.wisc.edu

<u>International Student Services (ISS)</u> offers a wide variety of services and programs to international students at the University of Wisconsin-Madison. The ISS staff provides information and programs to international students about the campus and community and provides support and assistance concerning visas and related immigration issues. ISS serves more than 4,000 international students on the campus at any given time. ISS provides valuable resources and services such as assistance with:

- 1) Add/Change of Major
- 2) F-1 & J-1 Employment Internship Options (CPE/OPT)
- 3) Extending I-20 visas
- 4) Legal and Tax Resources

University Health Services (UHS)

Location: 333 East Campus Mall, 7th floor

Tel: (608) 265-5600

Counseling for Engineering Graduate Students: The <u>UW-Madison's Counseling Service</u> is available because it is easier to concentrate on your studies if you can deal effectively with personal, academic and career concerns. Talking with someone who is objective and empathetic can help you sort through these concerns. To make an appointment, call (608) 265-5600. For more information, please visit the College of Engineering's <u>Student Services</u> page. *Also, UHS offers counselor consultation for College of Engineering students through the <u>University Health Services Let's Talk series.</u> <u>UHS Appointment Information</u>*

UW Madison Library System

Tel: (608) 262-1371

Email: libraries@library.wisc.edu
Online Chat: Ask a Librarian

There are libraries located throughout campus that offer a variety of resources for students on any subject. Please visit the <u>library main</u> page and graduate research support pages for more information. Set up a <u>virtual appointment</u> with library staff if interested in meeting for an overview of library resources and services.

UW Madison Writing Center

Location: 6171 Helen C. White Hall

Tel: (608) 263-1992

The <u>UW Writing Center</u> provide free of charge face-to-face and online consultations that focus on a number of different writing scenarios (i.e. drafts of course papers, resumes, reports, application essays, cover letters, theses, etc.). Writing Center instructors will not edit or proofread papers. Instead, their goal is to teach students to edit and proofread on their own to become a better, more confident writer.

International Academic Programs (IAP) (Study Abroad Program)

Location: 301 Red Gym **Tel:** (608) 265-6329

Email: peeradvisor@studyabroad.wisc.edu

<u>The International Academic Programs (IAP)</u> collaborates with academic units to develop and deliver high-quality study abroad programs that foster students' academic, personal, and professional growth. There are more than 200 programs in more than 60 countries available as program options for students wishing to study abroad.

Engineering Career Services (ECS), Office of Student Development

Contact Person: Julie Rae, ECS Associate Director (MS Research & PHD)

Location: 1150 Engineering Drive; 1415 Engineering Drive

Tel: (608) 262-3472

Email: julie.rae@wisc.edu

Contact Person: Sierra Strebe-Grim (MS Professional Programs: SEA & HFHSE)

Location: 1150 Engineering Drive; 1415 Engineering Drive

<u>Engineering Career Services</u> provides lifetime tools for successful career development in a rapidly changing world. ECS helps students prepare for internship/co-op as well as job searches (resume and cover letter writing, listing of potential employers, etc.), practice interviewing skills (mock interviews, sample interview questions), and learn other important career information such as negotiating job offers and salaries.

Useful Resources:

- ECS Workshop / Career Fair / Events Calendar and Policy Information
- <u>UW Madison HANDSHAKE Program</u> (Online Career Management System for all UW Students)

Internship / Cooperative Education

Obtaining work experience prior to completing your degree requirements typically increases employment opportunities and starting salaries at graduation. Most UW engineering co-ops work part or full-time in an engineering position from Jan.-Aug. or May-Dec. The co-op provides a solid 8 to 12 months of paid engineering work experience. Alternating assignments are also an option. Students should consult with their advisor for program timeline planning.

International Students wanting to engage in a summer internship or co-op during the semester for <u>Curricular Practical Training (CPT)</u> program experience should review the <u>steps</u> required to apply for a position. (Note: Restrictions apply for students in the MS course (HFHSE & SEA) programs per UW campus policy – please check with advisor for guideline information).

Internship / Cooperative education is an academic option as part of your engineering education. Students who participate complete assignments and receive academic credit toward graduation. Students are allowed to count a combined total of no more than 6 credits of ISyE 702 – Full time Graduate Cooperative Education Program/ ISyE 699 Ind Study or Part time Co-op /ISyE 790 MS Research towards graduation. Students should consult with faculty advisors for approval. For permission to enroll, please contact the ECS office.

While on internships, students are considered full-time students and are eligible to maintain family or UW health insurance. Compensation is competitive, averaging \$15/hr. The advantage of a co-op over an internship is the increased level of responsibility received due to the longer duration of the work term. Co-ops can work on larger and complex projects that require more time to complete. Please go to Engineering Career Services Co-op and Internship page for more information. The co-op credit applies toward graduation requirements differently in each department. See how your credit(s) can apply.

Summer Internships

The Summer Internship is for students seeking engineering employment during the summer months. These 12–14-week assignments provide students with exposure to engineering while enabling the employer to fill short-term project needs. For detailed information on the Cooperative Education or Summer Internship programs, please contact Julie Rae (MS & PHD) or Sierra Grim (MS Course/Professional programs) in the Engineering Career Services Office (M1002 Engineering Centers).

International students can work with the <u>International Student Services (ISS)</u> office regarding <u>Curricular Practical</u> <u>Training (CPT)</u> (internship and co-op opportunities) during their program. (Restrictions apply for MS course program students).

Students should sign up for the <u>Handshake Program</u> and then review CPT instructions <u>here</u>. Additional CPT and **Optional Practical Training (OPT** for after graduation) program information can be found <u>here</u>.

Off Campus Employment requirements for International Students:

- 1. Must be in lawful F-1 status
- 2. Must have been enrolled full-time for at least one academic year (Fall and Spring)
- 3. Must have a declared major (reflected in I-20)
- 4. Employment directly related to field of study

For detailed information on the Cooperative Education or Summer Internship programs, please contact <u>Julie Rae (MS & PHD) or Sierra Grim (MS Course/Professional programs)</u> in the <u>Engineering Career Services Office</u> in 1150 Engineering Hall.

For students in F-1 visa status to engage in paid or unpaid experiential learning opportunities, such as internships, practicums, or co-ops, they are required to have <u>Curricular Practical Training (CPT)</u> work authorization.

F-1 Federal Regulations limits where and when F-1 visa holders can work while within the U.S. ISS is matching its policies with the Graduate School to meet both requirements. Students who started their master's degree before fall 2024 will not have any changes to their practice. Students starting in fall 2024 or after will see a slight change in practice so that we are meeting the Graduate School rules and the Federal Regulations. See specifics for each below.

For all F-1 holding international students in a master's program:

You must maintain valid F-1 status:

- Be enrolled full-time in at least 8 credits or have an approved reduced course load from ISS
- Be enrolled in minimum 5 in-person credits that require your physical presence in Madison
- Practical training cannot delay graduation, if it is not an academic requirement of all students in the program (only part time CPT is an option during the fall & spring semesters)
- Curricular Practical Training (CPT) can be authorized full-time or part-time in the summer term for students who have been in valid F-1 status for at least 2 semesters (fall and spring)
- I-20 Program Extensions are approved for academic requirements only, your I-20 cannot be extended for the purpose of completing an optional co-op or internship
- Any remaining unmet credits due to participation in elective CPT, cannot be considered when requesting a program extension

For students who began a master's program before Fall 2024:

CPT can be authorized part-time or full-time in fall or spring semester if you have remaining credits to earn your degree and have been in valid F-1 status for at least 2 semesters (fall and spring)

- CPT can be authorized full-time or part-time in the summer term for students who have been in valid F-1 status for at least 2 semesters
- If you meet the above criteria, ISS will review your CPT request

For students beginning a master's program Fall 2024 or later:

CPT can be authorized full-time or part-time in the summer term for students who have been in valid F-1 status for at least 2 semesters

- If summer term is your final term, only part-time CPT can be authorized and physical presence in Madison is required to meet your in-person credits.
- CPT can be authorized part-time only in the fall or spring semester if a student is enrolled full time (8 credits +) and has remaining credits to be completed in the same or following term, physical presence in Madison is required to meet your in-person credits. At most, up to 3 credits of an online course enrollment are allowed to count towards the full-time status during the semester.

CPT in Final Term

Students considering doing a CPT in their final term (including summer) should be aware of the following:

- Must be enrolled full-time (at least 8 credits or have an approved Reduced Course Load from ISS) in required in-person or hybrid credits. At most, up to 3 credits of online course enrollment is allowed to count towards the full-time status during the semester.
- Must be **physically present** in Madison
- Practical training must be commuting to Madison or remote
- RCL approval does not eliminate the requirement to be enrolled in in-person/hybrid credits or to be physically present in Madison in your final term
- CPT must end at the same time or before your I-20 ends

If you have questions or concerns about these policy changes, please contact your <u>ISS advisor</u>. All questions about your enrollment or degree requirements should be directed to your Graduate Program Coordinator.

Engineering Student Center

Engineering Hall, Room 1150 1415 Engineering Drive Madison, WI 53706

<u>Tel:</u>

Email: studentcenter@engr.wisc.edu

The Engineering Student Center at UW-Madison's College of Engineering promotes student engagement and enhances engineering experience. By offering various academic and social programs and services, we foster a campus environment that is both welcoming and supportive for every student. The LEED and STAR Scholars programs are part of the Engineering Student Center.

Inclusion, Equity, and Diversity in Engineering

Location: 1415 Engineering Drive **Email:** contact-us@engr.wisc.edu UW Campus Inclusive Excellence

McBurney Disability Resource Center

Location: 702 W. Johnson Street, Suite 2104

Tel: (608) 263-2741 **TTY**: (608) 263-6393

Email: mcburney@studentlife.wisc.edu

Students who have a documented disability or suspect that they may have an undiagnosed disability are encouraged to contact the McBurney Disability Resource Center to inquire about obtaining academic accommodation. The McBurney Center provides academic accommodations such as adaptive/assistive technology access, assistive listening devices, document conversion, elevator keys, ASL interpreting, note taking support, testing accommodations, and reduced credit load recommendations to name a few. Students must provide documentation and be registered with the McBurney Center to receive Verified Individualized Services and Accommodations (VISA) before they can obtain accommodation. Apply for Accommodations here.

Master's Degree Programs and Requirements

The ISyE graduate program offers two types of MS degree programs in Industrial Engineering:

- (1) MS Professional Degree (30-credit)
 - MS in Industrial Engineering: Systems Engineering and Analytics (SEA)
 - MS in Industrial Engineering: Human Factors and Health Systems Engineering (HFHSE)
- (2) MS Research Degree (30-credit)

Master of Science in Industrial Engineering: Professional Program

MS Industrial Engineering: Systems Engineering and Analytics (SEA) – The program in Systems Engineering and Analytics will train students to recognize, identify, analyze, and solve decision problems arising in the efficient operations of engineering systems. The program focuses on methods and models for data analytics and data-driven decision-making. MS SEA Course Suggestions

MS Industrial Engineering: Human Factors and Health Systems Engineering (HFHSE) — By examining, designing, testing, and evaluating products, environments and how people interact in it, Human Factors and Health Systems_Engineering professionals can create productive, safe, and satisfying environments for humans, and apply industrial and systems engineering tools and approaches to specific health care problems. MS HFHSE Course Suggestions

MS Professional Program Grad Handbook, Policies and Planning Forms

MS Course Program / Graduate School Policy

- 30 credit degree programs; may transfer up to 9 credits of prior graduate coursework if applicant has previous MS degree from institutions other than UW-Madison with approval by department advisor
- UW-Madison students completing their bachelor's degree at UW-Madison may count to 6 credits of approved coursework numbered 300 or above towards the degree with prior program approval.
- Of the required credits, all must be at the 300 level or higher, at most 6 credits may be at the 300 level, at least 15 must be at the graduate level, at least 18 credits must be in the Industrial and Systems Engineering Department, and at least 16 credits must be taken as a graduate student in residence at UW-Madison. (Graduate-level courses are those identified with the Graduate Level Coursework attribute in the University course guide.)
- This accelerated program is designed to be completed in 12 16 months (including summer courses).
 Summer internship work experiences are an optional component to this degree. This MS program must be completed within 24 months (2 years). The ISyE department does not guarantee availability of internship positions. It is up to students to find such positions independently working with the Engineering Career Services office (ECS).
- In keeping with UW-Madison policy, students enrolled in the MS Course Programs (HFHSE and SEA) are not eligible to receive tuition remission from graduate assistantship appointments (RA, PA, or TA)
- For more information, please review the MS Course Program Policy Requirements.

Master of Science in Industrial Engineering: Research Program

<u>Master of Science in Industrial Engineering Research Program</u> (MSR) - The Department of Industrial and Systems Engineering offers this Master of Science (MS) industrial engineering degree with a named option in Research. This degree program takes approximately two years to complete. This program has a significant research component, giving students valuable hands-on research experience with mentoring by faculty in the Department of Industrial and Systems Engineering. The MS Research program requirements vary according to Focus Area and in consultation with their assigned faculty advisor.

MS Research Program Grad Handbook, Policy and Planning Forms

MS Research Program Policy Details

Completing Your Master's Degree:

To be eligible for graduation, an MS student must:

- Indicate plans to graduate in MyUW center
- Meet all MS degree course requirements
- Review ISyE MS Research Final Semester Program & Graduation Information and Graduate School Instructions on Completing Your Master's Degree.
- Have a GPA of 3.0 or higher
- Have all grades entered, except for the current semester (all I or NR (No Report) grades must be changed to an actual letter grade); please check your UW Student Transcript information to confirm that all final grades have been entered for previous semesters (all P [Progress], I [Incomplete], or NR [No Report] grades must be changed to actual letter grades in order for a final warrant to be processed). Final semester grades are not required to be posted when submitting the warrant request.
- Be enrolled in at least 2cr the semester in which they graduate or pay a Degree Completion Fee (which is equivalent to 2cr of tuition)
- Save approved and signed final MS planning grid to IE Box file to request MS degree warrant with the Graduate School (see instructions below).
- If you earn a D or below in any course, that course cannot be counted toward your MS program requirements
- Apply for graduation

Each semester, the Graduate Coordinator will send out an email asking for information from MS students who plan to complete their degree that semester. If you plan to graduate, please upload a final MS Planning Grid (links above, approved and signed by your advisor) to your <u>IE Box Folder</u> and send email to the Graduate Coordinator (Pam Peterson at prpeterson@wisc.edu) to confirm you are finishing your degree.

The Graduate Coordinator and Associate Chair of Graduate Affairs will review the students' GPA, grades, and courses to ensure they have met all the MS degree requirements to then submit a final MS Warrant request thru the E-warrant system with the Graduate School. Once the Graduate School approves the MS Warrant request, the Graduate School will send the final MS degree warrant to the department. An email will be sent to the student from the Graduate Coordinator when the warrant has been processed for confirmation. The department will then sign the final warrant at the end of the semester for the degree posting with the Graduate School. Students can then request a certified electronic diploma from the Registrar's Office.

Things to remember when finishing your MS degree:

- Once a student submits their degree warrant and applies for graduation, they will no longer be able to enroll in courses.
- Please contact the ISyE Payroll and Benefits specialist to confirm you are graduating.
- Once a student graduates, they can no longer be paid because they can no longer enroll for future semesters. Students will maintain student status *only* until the graduation date for the semester they graduate.
- International students are required to add a diploma address in their Student Center, or their diploma will NOT be mailed. For domestic students, the diploma will be mailed to their mailing address. The degree diploma will be mailed 12-14 weeks (about 3 months) after the degree deadline. Students should log into their Student Center and verify their mailing/diploma address to be sure it is correct.
- International students who want to invite their families to commencement need to fill out and submit an <u>invitation letter</u>.
- International students should also review the ISS Program Completion Checklist.
- An online survey will be emailed to all graduate students completing their degree. This survey is extremely helpful to the department in tracking where students go after graduation. We appreciate your cooperation in completing this survey.
- After graduating, students will have access to their email account for 9 months. Beginning 90 days before their
 account is deactivated, Do-It will send periodic emails to their <u>netid@wisc.edu</u> email notifying students of the
 date they'll lose access. In those reminder emails, we encourage students to move files or data before they lose
 access. If questions you can also <u>reach out to the Help Desk</u> and review the Do-It website here <u>February news</u>
 update
- Make sure to review the <u>Steps to Take Before Leaving UW-Madison</u>.
- Remember to stay connected and feel free to contact the Student Services Office if you have any questions or concerns in the future.

Double MS Degree Major Students

Students receiving a second master's degree from UW-Madison, and students receiving two master's degrees during the same semester, must submit official lists of courses used for each degree before requesting a final warrant. Students can overlap up to 25% of credits from the program approximately 8 credits of overlap. Example: One MS degree requires 30 credits and the other requires 24 credits. The student can overlap 25% of 24 credits which is 6 credits. All UW-Madison MS degrees are 30 credit programs.

PHD Degree Requirements

The Doctor of Philosophy degree is the highest degree conferred by the University. It is a research degree and is never conferred solely because of any prescribed period of study. The degree is granted on evidence of general proficiency, distinctive attainment in a special field, and the ability for independent investigation (as demonstrated in a thesis presenting original research or creative scholarship with a high degree of literary skill). PhD students should use the PhD Plan of Study form for tentative planning of PhD program requirements in consultation with faculty advisor.

The basic steps and requirements for a PhD degree in the ISyE Department include:

- 1. Completion of at least 51 graduate level degree credits (including research and 32 credits in residence at UW)
- 2. ISyE 961 Doctoral Student Seminar Enrollment for one semester
- 3. Qualifying Examination
- 4. Breadth Requirement
- 5. Colloquium Requirement
- 6. TA Position Requirement for 1 semester
- 7. Completion of Minor
- 8. Formation of Thesis Research and Committee
- 9. Preliminary Examination
- 10. Final Defense Examination

Additional Requirements for Human Factors PhD Students

HFE Depth Requirement: The depth requirement for human factors and ergonomics includes both coursework and exam components.

Course Requirement: To take the qualifying exam, a student will have to have received a grade of AB or better in at least one course in each of the three areas below. Courses taken during undergraduate studies can be used to satisfy this requirement:

a. Cognitive Ergonomics:

UW courses that would qualify: ISyE 555, ISyE 556, ISyE 601(depending on topic), ISyE 699 (depending on topic), ISyE 859 (depending on topic)

b. Sociotechnical Systems / Macroergonomics:

UW courses that would qualify: ISyE 555, ISyE 556, ISyE 610, ISyE 652, ISyE 653, ISyE 601(depending on topic), ISyE 699 (depending on topic), ISyE 854 (depending on topic)

c. Physical Ergonomics:

UW courses that would qualify: ISyE 555, ISyE 564, ISyE 565, ISyE 662, ISyE 601 (depending on topic), ISyE 699 (depending on topic)

Prior to defending their dissertation, Human Factors PhD students must complete at least six seminar/special topics courses at the 700 level or above totaling a minimum of 12 credits; at least three totaling at least 6 credits of these must be in the Human Factors and Ergonomics area. Students may use 700+ level seminar courses also as breadth courses if not Human Factors focused on requirements. Other courses may qualify. Students may submit courses to the HFE Area group for consideration. Transfer students should submit a course syllabus or description and transcript for any courses from other institutions they want to have considered for satisfaction of this requirement. The HFE Area group will make this decision.

Qualifying Examination

Based on a student's background and previous coursework, the PhD advisor should determine the coursework needed for a student to prepare for the Qualifying Examination. Prior to registering for the qualifying exam, the student must have completed either the PhD Tentative Plan of Study form or the PhD Tentative Plan of Study form (Human Factors Students). Students sign up for the qualifying exam by filling out the Qualifying Exam Registration Form by the first Friday of the fall semester in the year they plan to take the exam. This form must be returned to ME 3107. The qualifying exam is usually done after one year of graduate study beyond the MS degree. The qualifying examination requirement must be satisfied by the end of the fifth semester of enrollment after entering the graduate program. Exceptions to this time limit may be granted by appeal to the Academic Affairs cluster.

The format of the qualifying exam depends on the student's research area:

- 1. Operations Research, Optimization and Analytics
 - a. DS/OR Qualifying Exam
 - b. Optimization Qualifying Exam (note: this exam is administered by the **Computer Science Dept.**)
- 2. Health Systems Engineering
 - a. HSE Qualifying Exam
- 3. Human Factors and Ergonomics
 - a. HFE Qualifying Exam
- 4. Advanced Manufacturing and Industrial AI (Artificial Intelligence)
 - a. Manufacturing Production Systems (MPS) Qualifying Exam

Policies, examples, and other information regarding Qualifying Exams are categorized according to specific focus areas, and can be found on the ISyE Department Intranet website.

Breadth Requirement (12 credits)

The purpose of the <u>breadth requirement</u> is to make sure the PhD student achieves minimum competence in multiple areas of industrial and systems engineering. It consists of taking at least two courses (6 credits) in **methodology** and two courses (6 credits) in **application**. Students can choose these courses from the list below and must obtain a grade of B or above in both courses.

The courses selected by the student must be approved by the student's advisor (via the PhD Tentative Plan of Study form). These courses must be completed before a PhD student can request their Preliminary Warrant. Courses the student has taken before entering the PhD program can be counted toward this breadth requirement, including courses taken as an undergraduate. Students should submit the course title and syllabus to the Student Services Coordinator who will then seek approval from the Chair of Graduate Affairs.

- It is allowed to use courses within a student's research area to meet this requirement.
- A student must receive a grade of B or higher to use a course for this requirement.
- As of the time of this policy revision, methodology courses include courses in Human Factors and Ergonomics and Operations Research, Optimization and Analytics areas, and application courses include courses in the Health Systems Engineering and Advanced Manufacturing and Industrial AI areas.
- Transfer courses and courses taken by a student as an undergraduate can be used to meet this requirement if they are determined to qualify as an ISyE methodology or application course. This determination is made by the associate chair for graduate affairs in consultation with the student's faculty advisor and faculty in the associated area.

List of Approved Breadth Requirement Courses from UW-Madison

Methodology:

- ISyE 313: Engineering Economic Analysis
- ISyE 320: Simulation and Probabilistic Modeling
- ISyE 323: Operations Research: Deterministic Modeling
- ISyE 349: Introduction to Human Factors
- ISyE 412: Fundamentals of Industrial Data Analytics
- ISyE 425: Introduction to Combinatorial Optimization
- ISyE 512: Inspection, Quality Control and Reliability
- ISyE 515: Engineering Management of Continuous Process Improvement
- ISyE 516: Introduction to Decision Analysis
- ISyE 518: Wearable Technology
- ISyE 521: Machine Learning in Action for Industrial Engineers
- ISyE 524: Introduction to Optimization
- ISyE 525: Linear Programming Methods
- ISyE 526: Advanced Linear Programming
- ISyE 549: Human Factors Engineering
- ISyE 552: Human Factors Engineering Design and Evaluation
- ISyE 555: Human Performance and Accident Causation
- ISyE 562: Human Factors of Data Science and Machine Learning
- ISyE 564: Occupational Ergonomics and Biomechanics
- ISyE 575: Introduction to Quality Engineering
- ISyE 602: Special Topics in Human Factors
- ISyE 603: Special Topics in Engineering Analytics and Operations Research
- ISyE 618: Quality Engineering and Quality Management
- ISyE 620: Simulation Modeling and Analysis
- ISyE 624: Stochastic Modeling Techniques
- ISyE 632: Introduction to Stochastic Modeling
- ISyE 649: Interactive Data Analytics
- ISyE 652: Sociotechnical Systems
- ISyE 653: Organization and Job Design
- ISyE 719: Stochastic Programming
- ISyE 722: Computer-Based Data Management
- ISyE 723: Dynamic Programming and Associated Topics
- ISyE 726: Nonlinear Optimization I
- ISyE 727: Convex Analysis
- ISyE 730: Nonlinear Optimization II

Applications:

- ISyE 315: Production Planning and Control
- ISyE 415: Introduction to Manufacturing Systems, Design and Analysis
- ISyE 417: Health Systems Engineering
- ISyE 510: Facilities Planning
- ISyE 513: Analysis of Capital Investments
- ISyE 517: Decision Making in Health Care
- ISyE 520: Quality Assurance Systems
- ISyE 552: Human Factors Engineering Design and Evaluation
- ISyE 556: Occupational Safety and Health Engineering
- ISyE 557: Human Factors Engineering for Healthcare Systems

ISyE 578: Facilities Location Models

ISyE 602: Special Topics in Human Factors

ISyE 604: Special Topics in Manufacturing and Supply Chain Management

ISyE 605: Computer Integrated Manufacturing

ISyE 606: Special Topics in Healthcare Systems Engineering

ISyE 610: Design of Program Evaluation Systems

ISyE 612: Information Sensing and Analysis for Manufacturing Processes

ISyE 615: Production Systems Control ISyE 617: Health Information Systems

ISyE 641: Design and Analysis of Manufacturing Systems

ISyE 643: Performance Analysis of Manufacturing Systems

ISyE 645: Engineering Models for Supply Chains

ISyE 658: Managing Technological Change in Manufacturing Systems

ISyE 662: Design and Human Disability and Aging

ISyE 671: E-Business: Technologies, Strategies and Applications

ISyE 703: Quality of Health Care: Evaluation and Assurance

ISyE 729: Behavioral Analysis of Management Decision Making

ISyE 859 Seminar Topics-Human Factors Engr: Engineering & Legal Issues

ISyE 875: Cost Effectiveness Analysis in Health and Healthcare

Colloquium Requirement

Students must enroll in <u>I SY E 961</u> Graduate Seminar in Industrial Engineering for at least three semesters per <u>ISyE P</u> <u>14.1</u> section 4.5. The appropriate colloquium series must be approved by the student's faculty advisor. Attendance at the approved colloquium series must be confirmed by the student's faculty advisor when the student submits their PhD Plan of Study prior to their preliminary examination.

Ph.D. Minor

Ph.D. Students must complete a Minor (breadth) requirement for their degree program by completing a cohesive group of courses outside the ISyE major in order to add breadth to their program. The courses should help students in their PhD research preparation. The student must consult the requirements for his or her PhD minor with their advisor before deciding which option to pursue.

Once a Minor is decided, students must declare their Minor program information through the <u>Graduate School</u> <u>Add/Change Program Request System</u> to add this to their student record. Students should list their intended minor via the PhD Tentative Plan of Study Form, which must be approved by their advisor. **Minors must be completed by the end of the semester during which the preliminary exam is taken.**

The Minor consists of two options:

Option A Minor: Some departments require more than 9 credits for a Minor and others have specific course requirements. The Department of Industrial and Systems Engineering requires at least 9 credits of coursework in a single department and approval by that department. Please check with each department for their specific Minor requirements.

Option B Minor: Requires at least 9 course credits from one or more departments. An ISyE course may not be used for Option B minor, except that a course cross listed with ISyE may be used if the home department for such course is not ISyE. In addition, the student advisor must approve the set of courses being used to satisfy Option B minor. The student

must choose a Minor Topic and submit an attached paragraph explaining how their minor courses relate to their Minor Topic and provide a cohesive minor enhancing their Doctoral Program. For Option B, the minor proposal must be approved before or by the time six of the total credits required for the minor are completed. Students must submit their approved Minor Form before they can request their Preliminary Warrant. Minor approval forms for either option can be obtained on the ISyE website forms page. For more information, please see the PhD Policy ISyE P 14.1.

Thesis Research and Committee

Attaining a PhD requires preparing a thesis on a research topic selected by the student and their advisor. Once a research project is selected, the student must choose his or her thesis committee*. The ISyE Graduate Program requires the thesis committee to consist of at least four members for the Preliminary Exam Committee and at least four members for the Final PhD Defense Committee, including:

- The Committee Chair (the student's primary advisor). The Committee Chair must be an ISyE faculty. Emeritus faculty cannot serve as the Committee Chair.
- Three other graduate faculty members or former UW-Madison graduate faculty up to one year after resignation or retirement with two faculty members having their tenure home in ISyE.
- All Committee members are required to be readers.
- The dissertation committee must consist of at least 4 members (4 members for prelim exam) and meet the requirements set forth by the Graduate School, including for example, at least one of the members of the committee must be from a UW-Madison program outside the Industrial and Systems Engineering Department.
- Additional committee members may be added from any of the following categories: graduate faculty, faculty from a department without a graduate program, academic staff (including emeritus faculty), visiting faculty, faculty from other institutions, scientists, research associates, and other individuals deemed qualified by the executive committee (or its equivalent).

Please visit the <u>UW-Madison Policy Library</u> for additional committee information.

Preliminary Examination and Dissertator Status

This preliminary examination includes an oral presentation based on a written proposal and a detailed plan to carry out the PhD thesis. The Preliminary Exam signifies that point at which a PhD student has completed all the necessary course work and is ready to strictly carry out research for the rest of their program. Students must consult with their advisor for specific details of the requirements for the preliminary examination. The written component of the preliminary examination includes a literature review and research results obtained to that point, together with the proposal for the remaining work to be included in the thesis. The preliminary examination should be completed well before all the dissertation research is complete (e.g., ideally over a year before the final oral defense), for the student to receive feedback from the exam committee on the research plan.

The preliminary exam must be completed within 4 years of joining the ISyE graduate program (including time taken in the ISyE MS graduate program at UW), and within 3 years of passing the qualifying exam. Exceptions could be granted by the Academic Affairs Cluster through a petition process.

Students should upload a completed Minor form and PhD Prelim Exam Request to their IE student BOX folder with only their advisor's signature, which will notify the Graduate Coordinator (<u>Pam Peterson</u>) to obtain the Associate Chair's signature. (Students in the Human Factors and Ergonomics area group should fill out the HFE Prelim Exam Request Form for confirming they have met the coursework requirements for that area – see HFE course requirements described on page 27).

• After uploading the form to BOX, students should email Graduate Coordinator Pam Peterson for confirmation.

- The Graduate Coordinator and Associate Chair for Graduate Affairs will review the student's GPA and transcript record to confirm the PhD program requirements for taking the Prelim Exam have been met.
- The Graduate Coordinator will then request the Prelim Exam warrant from the Graduate School; processing time generally will take 2-3 weeks.
- Once the warrant is processed, students will be notified by the Graduate Coordinator and can see a copy of the
 warrant in their MyUW student center graduate portal. On the day of their Prelim Exam, students should email
 the Graduate Coordinator, who will send the committee members a link to collect e-signatures.

Upon passing the Preliminary Exam, PhD students will obtain Dissertation Status. A dissertator is a unique reduced tuition fee status for students who have completed all requirements for a PhD degree except for the dissertation.

Once students achieve dissertator status, they must maintain continuous enrollment until completion of the doctoral degree. To maintain continuous enrollment, dissertators must enroll each fall and spring semester for 3 credits (usually ISyE 990 Research) directly related to their dissertation research (generally research and thesis and/or required seminars). In some cases, the 3 credits can be a combination of research and a seminar. Fall and spring enrollment are required whether they reside in Madison. Summer enrollment is required if finishing with a summer PhD degree posting.

To be eligible for the Preliminary Examination, a PhD student must:

- Have a GPA of 3.0 or higher
- Complete at least 32 credits of graduate-level courses in residence at UW-Madison (including research credits)
- Pass the Qualifying Exam and complete Breadth Requirement
- Declare Minor program information in the Graduate School Add/Change Program request system and complete their Minor Program Form information signed by minor program advisor / department.
- Students much check their UW transcript information to confirm all grades have been entered, except for the current semester. No Progress (P), Incomplete (I) or No Report (NR) grades can show on the student's transcript.

Ph.D. Final Defense Exam and Warrant

The ISyE PhD final defense examination requires a demonstration of the unique contributions of the research and a defense of the methods used and conclusions drawn. The final defense must be completed either within two years after passing the Preliminary Examination or by the end of the 6th year in the graduate program, whichever is later. Please see the Graduate School Doctoral Guide for more information on finishing your degree.

PhD Final Semester Program & Exit Requirements

To be eligible for graduation, a PhD student must:

- Have a GPA of 3.0 or higher
- Meet all PhD degree requirements
- Have all grades entered, except for the current semester; please check your UW Student Transcript information to confirm that all final grades have been entered for previous semesters (all P [Progress], I [Incomplete], or NR [No Report] grades must be changed to an 'S' Satisfactory grade or actual letter grades in order for a final warrant to be processed. Final semester grades are not required to be posted when submitting the warrant request.
- Be enrolled in at least 3 credits the semester in which they graduate or pay a Degree Completion Fee (which is equivalent to 12 times the per-credit dissertator rate of tuition)
- Complete a <u>PhD Final Defense Warrant Request</u> with the department.

- Submit a <u>Final PhD Defense Announcement</u> with the department.
- Have their final PhD Final Defense Warrant signed, dated, and submitted electronically through the ProQuest System to the Graduate School by the degree deadline.
- Students can then request a <u>certified electronic diploma</u> from the <u>Registrar's Office</u>.

The PhD Final Defense Warrant Request must be submitted at least four weeks before the proposed exam date.

After the final PhD defense, the student must follow all the procedures described in the <u>Guide to Preparing Your</u> <u>Doctoral Dissertation</u>. The student is responsible for following the Graduate School procedures and depositing of their signed final PhD warrant and dissertation electronically with the Graduate School.

Things to remember when completing your PhD degree:

- Make sure to notify the Graduate Student Coordinator <u>Pam Peterson</u>, as well as the departments that you are planning to graduate from UW.
- If you are being funded by the department as a RA/TA/PA, please also notify the Payroll and Benefits Specialist in 3107 ME.
- Return all keys to Main Office Manager, Kelly Petersen in 3107 ME.
- Once a student submits their warrant and final dissertation to the Graduate School, they will no longer be able to enroll for future semesters.
- Once a student graduates, they can no longer be paid because they can no longer enroll for future semesters. Students will maintain student status *only* until the graduation date for the semester they graduate.
- International students are required to add a diploma address in their Student Center, or their diploma will NOT be mailed. For domestic students, the diploma will be mailed to their mailing address. The degree diploma will be mailed 12-14 weeks (about 3 months) after the degree deadline. Students should log into their Student Center and verify their mailing/diploma address to be sure it is correct.
- International students that would like to invite their families to UW-Madison for commencement may request an invitation letter through the International Student Services office.
- International students should also review the ISS Program Completion Checklist.
- An online survey ISyE Graduate program Exit survey will be emailed to all graduate students completing their degree. This survey is extremely helpful to the department in providing program feedback for graduating students. We appreciate your cooperation in completing this survey.
- After graduating, students will have access to their email account for 9 months. Beginning 90 days before their account is deactivated, Do-It will send periodic emails to their <u>netid@wisc.edu</u> email notifying students of the date they'll lose access. In those reminder emails, we encourage students to move files or data before they lose access. If questions you can also <u>reach out to the Help Desk</u> and review the Do-It website here <u>February news update</u>
- Please stay in touch with the ISyE Department after graduation and should you have any questions or need assistance in the future, please feel free to contact the ISyE Graduate Coordinator Pam Peterson or the ISyE main office staff.
- Students should also review the <u>Steps to Take Before Leaving UW-Madison</u>.

Commencement and Beyond

UW Commencement

Graduate students are encouraged to participate in the commencement ceremony. Commencement ceremonies are held in December and May. Because there is no ceremony offered during the summer, students can participate in the Fall or Spring ceremony. Students should think of their degree completion and participation in the commencement ceremony as two separate events.

To participate in the commencement ceremony for any given semester, the student must notify the Student Services at least 8 weeks (about 2 months) before. A student can decide to participate in the ceremony up until the day of the ceremony, but if they have not notified the Student Services 8 weeks (about 2 months) before the ceremony, their name will not be printed in the commencement program. Traditionally, PhD students are escorted by their faculty advisor. PhD students should discuss their commencement plans with their advisor. For more information on ordering the proper attire, dates, and times, please see the Secretary of the Faculty website.

UW Graduate Checklist

*Remember to <u>order your cap and gown</u> and to check out <u>the College of Engineering Graduation Recognition Event</u> page.

Staying connected after graduation as a student and alum

Please make sure to stay in touch via the following social media outlets but also feel free to contact our Communications Specialist with stories you want to share about how ISyE has impacted your life and career.

ISyE Facebook, Twitter, LinkedIn, Instagram, and YouTube Pages

Please be sure to like our Facebook page and follow our Twitter feed to stay up to date on all that is happening in ISyE. See photos and updates from your favorite faculty members, connect with current and past classmates, share your own ISyE story, and read about how ISyE students, alumni, and faculty are making things better.

- Facebook (@uwisye)
- X (@uwisye)
- LinkedIn Department Page (UW-Madison Dept. of Industrial and Systems Engineering (ISyE)
- Instagram (uwisye)
- <u>YouTube</u> (uwmadisonISyE)

ISyE Alumni and Student LinkedIn Group

This is a terrific opportunity to stay connected to your classmates and build a professional network through ISyE alumni and students. The UW-Madison ISyE Alumni and Student LinkedIn Group will allow you to search, find, and contact other ISyE alumni and students in addition to the hundreds of thousands of users you can reach through your extended LinkedIn network. It is a convenient approach to connect with others and maintain up-to-date contact information. LinkedIn employs an opt-in-approach to selective networking, meaning you control the amount of detail you share and who to share it with. Contacts only occur with and through people you know and trust. And there is no cost to join LinkedIn!

Financial Support/Insurance Benefits

<u>Teaching Assistantship (TA) / Research Assistantship (RA) / Project Assistantship (PA)</u>

The ISyE Department offers several diverse types of financial support for graduate students in the research option and PhD programs. Three common types of financial support are Teaching Assistantships, Research Assistantships, and Project Assistantships (TA/RA/PA respectively). Teaching Assistants, Research Assistants, and Project Assistants with at least a 33% appointment are eligible to receive tuition remission and health insurance coverage. Please note, students who receive tuition remission are still *required to pay segregated fees* by the tuition due date. The amount charged for segregated fees is based upon the number of credits the student has enrolled in. Tuition and Segregated fees can be viewed and paid through the student center section of a student's MyUW account. Please contact ISyE Payroll staff for more information.

In keeping with <u>UW-Madison policy</u>, students enrolled in the MS Course Programs (HFHSE and SEA) are not eligible to receive tuition remission from graduate assistantship appointments (RA, PA, or TA)

Applying for Research Assistantships:

Professors decide whom they will appoint as a <u>Research Assistant (RA)</u> on their research grants. Professors review graduate applicants when hiring new RAs.

Applying for Project Assistantships:

There are a few <u>Project Assistant (PA)</u> opportunities on campus. Professors decide whom they will appoint as PAs on their research grants. Announcements of openings are sometimes posted on UW Job Center.

Applying for Teaching Assistantships:

<u>Teaching Assistant (TA)</u> positions are highly competitive, and the number of positions offered is relatively small compared to the number of applicants. TA positions are assigned by the department. When there is an unfilled position, a recruitment announcement will be posted, and an email will be sent to eligible ISyE graduate students.

English Language Requirements for Teaching Assistants:

All international students applying for teaching assistant positions must meet the UW–Madison Graduate School's requirement for spoken English BEFORE they can be considered as a TA. This requirement can be fulfilled in three possible ways:

- 1. Pass the SPEAK—you can register for the SPEAK test through Jenna Moss in Room 3107 ME, jamoss@wisc.edu.
- 2. Receive a 26 or higher on the speaking portion of the TOEFL (Test of English as a Foreign Language) test (or equivalent). Provide a copy of your score to Jenna Moss in Room 3107 ME, jamoss@wisc.edu
- 3. Receive a 4-year bachelor's degree from an institution in the United States.

Criminal Background Check: A criminal background check will be conducted on all new graduate assistants.

Required Training – New teaching assistants: College policies require these workshops for all new TAs. The workshops benefit TAs and the students with whom they interact. Because each university is different, even those who have

attended TA or teacher training at another university are required to participate. You will build from a common base and share perspectives with both new and experienced engineering educators.

The mission of the program is to improve the quality of undergraduate and graduate education through a series of workshops that enable teaching assistants to develop professionally and to continuously improve those skills needed to enhance student learning. To accomplish this mission, the program will aim to generate enthusiasm and excitement about teaching and place an emphasis on the value and importance of their role as a teacher. Furthermore, this program aims to expose participants to education and learning theories and to provide practical suggestions to help teaching assistants with their classroom responsibilities. Finally, the program is designed to foster communication among those who teach in the College of Engineering.

Required Training – Experienced TAs: A TA appointment requires attendance at this program. Please choose workshops that will meet your needs and the needs of your students. Information on the New Educators Orientation (NEO) can be obtained at http://ceete.engr.wisc.edu/ta-training/. There are two classifications of Teaching Assistants based on experience training and education.

- 1) Standard TA: A TA who does not meet the qualifications of a Senior TA.
- 2) **Senior TA:** Has had one and two-thirds (1¾) or more semester-units of experience and has completed all course-work and departmental requirements for candidacy for a PhD or has already been awarded a PhD and has completed one and two thirds (1¾) or more semester units of experience prior to employment.

Note: TAs are included in a labor agreement between the State of Wisconsin and the Teaching Assistants Association. This agreement contains valuable information regarding Teaching Assistantships.

Teaching Assistants will receive student evaluations using the College of Engineering Teaching Evaluation Form.

Department Rate Compensation

RA and TA Annual stipend rate is \$39,000 for a 50% appointment.

Useful Links:

- Graduate School Funding and Financial Aid
- ISS Funding and Scholarships
- Bursar's Office/Tuition

Health Insurance

TAs, PAs, RAs, and fellows holding a minimum of 33% appointment are eligible for group health insurance through the university. The university will pay for most of the premium. You are encouraged to take care of this as soon as possible, as the **strict deadline of a 30-day enrollment period** is observed.

All UW-Madison students are eligible to receive health care at the University Health Service (UHS). Hospitalization and emergency room services are not included in UHS benefits. To activate your insurance benefits, you must see the Payroll & Benefits Specialist.

<u>Health Insurance for International Students:</u> International students are required to purchase SHIP insurance unless they have other health insurance that meets certain minimum standards. International students with a RA or RA/TA appointment are eligible for UW health insurance; once you sign up for a UW health insurance plan you are automatically waived from the SHIP requirement. For more information see: http://www.uhs.wisc.edu/.

Tax Information

All RA, TA and fellowship income is subject to federal and state income tax. However, only RAs and TAs have taxes withheld from their checks; fellows do not. You may want to save receipts for school fees, books, and supplies in case you can claim tax deductions for them. Check with your tax advisor. Tax withholding (W4) forms can be easily accessed online. For questions about specific tax situations, students should contact the Internal Revenue Service or a tax advisor. The UW does not provide tax advice.

<u>Tax Information for International Students:</u> Non-US residents from countries with which the US has a tax treaty may be tax exempt. More information and other tax filing resources can be found at https://uwservice.wisconsin.edu/tax/filing-resources.php.

ISyE Department Policies

All Department Policies are available to view on our intranet page.

Grievance Procedures

If a student feels unfairly treated or aggrieved by faculty, staff, or another student, the University offers several avenues to resolve the grievance. Students' concerns about unfair treatment are best handled directly with the person responsible for the objectionable action. If the student is uncomfortable making direct contact with the individual(s) involved, they should contact the advisor or the person in charge of the unit where the action occurred (program or department chair, section chair, lab manager, etc. Many departments and schools/colleges have established specific procedures for handling such situations; please check their web pages and published handbooks for information. If such procedures exist at the local level, these should be investigated first. For more information, visit the College of Engineering website.

Procedures for proper accounting of student grievances against ISyE faculty, staff, or students:

- 1. The student is encouraged to speak first with the person toward whom the grievance is directed to see if a situation can be resolved at this level.
- 2. Should a satisfactory resolution not be achieved, the student should contact the Associate Chair for Graduate Affairs, to discuss the grievance. The Associate Chair will facilitate problem resolution through informal channels and facilitate any complaints or issues of students. The first attempt is to help students informally address the grievance prior to any formal complaint. Students are also encouraged to talk with their faculty advisors regarding concerns or difficulties, if necessary. University resources for sexual harassment, discrimination, disability accommodations, and other related concerns can be found through the <u>UW-Madison Office of Compliance</u>.
- 3. Other campus resources include:
 - The Graduate School
 - McBurney Disability Resource Center
 - Employee Assistance Office
 - Ombuds Office
 - University Health Services
- 4. If the issue is not resolved to the students' satisfaction, the student can submit the grievance to the Grievance Advisor, which may be either the Associate Chair for Graduate Affairs or the Department Chair, as chosen by the student. The grievance should be submitted in writing, within 60 calendar days of the alleged unfair treatment.
- 5. On receipt of a written complaint, the Grievance Advisor will form a faculty committee that will review the complaint and gather further information as necessary from the filer of the complaint and other parties involved (including the party to whom the complaint is directed).
- 6. The faculty committee will determine a decision regarding the grievance. The Grievance Advisor will report on the action taken by the committee in writing to both the student and the party toward whom the complaint was directed within 15 working days from the date the complaint was received.
- 7. At this point, if either party (the student or the person toward whom the grievance is directed) is unsatisfied with the decision of the faculty committee, the party may file a written appeal. Either party has 10 working days to file a written appeal to the School/College.
- 8. Documentation of the grievance will be stored for at least 7 years. Significant grievances that set a precedent will be stored indefinitely.

UW Graduate School Grievances & Appeals: The Graduate School has procedures for students wishing to appeal a grievance decision made at the school/college level. These policies are described in the <u>Graduate School Academic Policies and Procedures – Grievances & Appeals</u> website.

Hostile and Intimidating Behavior

Hostile and intimidating behavior, sometimes known by the shorthand term "bullying," is defined in university policy as "unwelcome behavior pervasive or severe enough that a reasonable person would find it hostile and/or intimidating and that does not further the University's academic or operational interests."

Hostile and intimidating behavior (HIB) can occur in both the private and public sectors, including colleges and universities. Even individual instances of such behavior can have a significant effect on the person it is aimed at, and can take a physical and emotional toll, reduce the effectiveness of a person's work, and hamper the ability of individuals – and entire units – to do their work. It is a significant reason for unhealthy workplace climate and culture and should be addressed immediately.

Hostile and intimidating behavior can occur both within and across employment sectors – faculty on faculty, faculty on staff, etc. – and power differentials, and in any university setting (the office, the lab, in the halls, at meetings; it can happen in groups or one-on-one). Regardless of when and how it happens, it must be addressed and corrected. Hostile and intimidating behavior is prohibited by university policy.

To learn more about this campus policy and find helpful resources, please consult this University Human Resources page: <u>Hostile and Intimidating Behavior</u>.

Policy on Sexual Misconduct

When sexual misconduct occurs, it degrades the quality of work and education at the University of Wisconsin-Madison. It erodes the dignity and productivity of the individuals involved and diminishes the quality, effectiveness, and stature of the institution. It can occur in any university setting (an office, a classroom, a university program). Each of us has a collective responsibility to act responsibly when confronted by the issue of sexual misconduct, thereby promoting an environment that better supports excellence in teaching, research, and service. You can find the full UW-Madison Policy on sexual misconduct here:

• <u>UW-Madison Policy on Sexual Harassment and Sexual Violence</u>

Parental Leave Policy for Graduate Student Assistants

The College of Engineering (CoE) and the Department is fully committed to providing a climate of support for women and their partners who choose to have children during their graduate studies. The goal of this parental leave policy is to reduce academic and financial hardships for a) female graduate students during the late stages of their pregnancy, childbirth, and postpartum periods, and b) any graduate student who is a new parent providing care for his/her infant.

All CoE graduate students with current research, teaching, or project assistantships are eligible to request parental leave under this policy. Upon request, expectant mothers will be provided with 12 weeks of paid accommodation for childbirth. Other new parents (father, adoptive mother, adoptive father) will, upon request, be provided with 6 weeks of paid accommodation time. There will be no research or teaching expectations of the student during the leave.

Students should ideally notify their department (through the Department Administrator or Department Chair) six months prior to the expected birth to request leave. Students should alert their research advisor or TA coordinator at that time as well to ensure that the ongoing research and teaching environment is safe for the expectant mother. It is recognized that each case will be unique in terms of the timing of the pregnancy or adoption relative to the academic calendar, and that creative and supportive solutions will be required on the part of advisors, chairs, TA coordinators, etc.

The leave will ordinarily begin at the time of birth, but other proposals will be considered. Departments – both advisors and chairs – are expected to provide flexibility in working out the details of the leave and to adjust the timeline of the leave as needed to accommodate any unexpected medical issues that arise during pregnancy (e.g., doctor-ordered bed rest).

Expectations Regarding Graduate Students Engaged in Research and their Faculty Advisors

The following is from <a>ISyE Policy 11.3, which applies to all graduate students and faculty engaged in research.

Mutual and Department Expectations

- Advisors and students will carry out their respective responsibilities with the aim of performing research
 at the level of a world-class university in an honest and ethical manner. Advisors are expected to provide
 guidance to students on what constitutes honest and ethical research.
- Advisors and students should work together to meet departmental time-to-degree expectations.
- <u>ISyE Policy 14.1</u> includes the specific timeline requirements. PhD students should aim to complete their preliminary exam at least one year prior to their final oral defense.

Expectations of faculty advisors

- For a PhD student admitted with a departmental funding guarantee, the advisor commits to providing
 financial support for the duration of the student's funding guarantee in the form of a research assistantship
 or teaching assistantship, assuming satisfactory academic progress. The process for determining if a student
 is meeting satisfactory academic process is described in ISyE P 11.1. Since all research is unique, what
 constitutes satisfactory progress will necessarily vary by research area and advisor.
- Advisors will provide an intellectual environment that is conducive to research and graduate education at a level consistent with a world-class university. This includes providing an environment that is welcoming to all students, provides opportunities to learn and conduct research, and is free from hostile and intimidating behavior, bias, harassment, etc.
- Advisors will communicate on a regular basis with students regarding the progress of their research, including praise and constructive criticism as appropriate, always with the aim of educating the student to become a leading researcher in their field. At a minimum, advisors will provide feedback annually via the Graduate Online Assessment and Achievement Learning System, but more frequent feedback is encouraged.
- Advisors will communicate on a regular basis (at least annually) with students regarding their professional development.
- Advisors will clearly communicate, written or verbally, the meeting and working hours expectations they
 have of students working with them. Assistantship positions do not formally include vacation. However,
 advisors may allow students to work with them some time off and should communicate to their students
 their expectations for time off.
- Advisors will communicate to students their expectations for supporting students' travel to academic conferences.
- Advisors will recognize students for their contributions to a research program. Typical forms of recognition include authorship/co-authorship of journal and conference publications and reports and supporting students to present research findings at professional meetings and conferences when possible. Advisors should clearly communicate to their students the contributions that are expected to be considered a coauthor on a publication.
- Advisors will provide the students working with them with the resources required to conduct the research
 they are being supported to conduct, including a safe and clean working space, necessary equipment,
 necessary software, etc.
- Advisors shall only instruct graduate students to perform tasks that are directly relevant for their
 assistantship appointment. Advisors may suggest additional tasks that are directly relevant for the pursuit of
 the student's degree or professional and career development. Advisors will follow the graduate school
 policies on RA appointments (https://grad.wisc.edu/documents/research-assistant/
- Advisors recognize that students are allowed to change their faculty advisor, and advisors will not hinder the
 academic progress of a student who changes advisors. An advisor's responsibility is to provide financial
 support for a student if a student changes to a new advisor. Advisors will not retaliate in any way against
 students who choose to leave their group.

Expectations of graduate students

• Students will take primary responsibility to inform themselves of and conduct themselves in accordance with the Graduate School's policies and procedures, specific program requirements, and standards of performance established by faculty and articulated in departmental graduate student handbooks. Graduate school academic policies and procedures can be found on their web site: https://grad.wisc.edu/academic-policies/. The program requirements are available in the Guide: https://guide.wisc.edu/graduate/.

- Students will recognize that as graduate students at Wisconsin, their efforts are rewarded both financially through their assistantship position, and educationally through credit earned and their general professional preparation. Accordingly, they will devote an appropriate amount of time and energy toward achieving academic excellence and earning their advanced degree. According to UW-Madison guidelines, a 50% assistantship amounts to an average of 20 hours of work per week. This does not include time spent on courses or tasks related to research credits.
- Students will take responsibility for and ownership of their research projects. To complete a PhD, students will demonstrate the ability to independently plan and execute research and disseminate that research in both oral and written forms, including peer-reviewed publications.
- Students with assistantship positions should:
 - expect that coursework and assistantship duties amount to a full-time professional commitment,
 - consult faculty advisors for guidance on course loads that are commensurate with assistantship responsibilities,
 - complete training and deliverables as required by funding agencies,
 - coordinate, in advance, workload adjustments to accommodate temporary periods of intense coursework activity,
 - and coordinate absences and vacations with their faculty advisors in advance.
- Students will communicate regularly with faculty advisors on matters related to research, academic progress, concerns, and problems they are encountering. Students will complete their self-assessments in the Graduate Online Assessment and Achievement Learning System each year.
- Students will take the initiative to pursue appropriate professional training programs, seminars, mentors, and courses that will enhance their professional development. Before participating in programs or activities with a substantial time commitment, students will consult with their advisor.
- Students are expected to inform the faculty advisor and the department graduate program coordinator of any leaves of absence that may be needed, as well as their date of departure and expected date of return.
- Students will work with faculty to agree prior to submission of scholarly contributions (e.g., papers, abstracts of presentations) upon authorship positions or acknowledgements commensurate with levels of contributions to the work.
- Students are expected to check with their faculty advisor before submitting an abstract to a conference or otherwise making plans for research-related travel.
- Contribute, to the extent possible, to the discourse of the scholarly discipline through presentations, publications, collaborative projects, and other means.
- Graduate students are expected to contribute to a research environment that is inclusive and welcoming to
 other students and staff. Graduate students are also encouraged and expected to report incidents of hostile
 or intimidating behavior, bias, harassment, etc. by their advisor, faculty, students, staff, or any person. Such
 incidents can be reported to the ISyE Associate Chair for Graduate Affairs or the College of Engineering
 Assistant Dean for Graduate Affairs.

Computing in Industrial & Systems Engineering

UW Madison – Information Technology (DoIT)

DoIT (Division of Information Technology) offers students the following services:

- Advice on software or hardware
- A network connection
- Training
- Help 7 days a week
- Warranties
- Repair and installation
- Software training for students
- Sales advice and competitive prices
- Tech help is free

For more information visit **DoIT**

Computer-Aided Engineering (CAE)

CAE is a College of Engineering facility available to any student with an engineering major or enrolled in an engineering course, as well as faculty and staff of the College. CAE provides users with access to facilities and resources that allow them to effectively compute on the engineering campus. Users have access to a broad range of resources and services which include:

- Windows XP and Linux computer lab access
- Networked file space
- Laser and Color Printers
- Hundreds of software titles
- Email and webpage access
- CAE Consultants in Rm. 172 CAE Building, by phone at 262-5349, or helpdesk@cae.wisc.edu
- Online help
- Access to account management features
- CAE file restoration

For more information go to: Getting Started – Computer-Aided Engineering – UW–Madison (wisc.edu)

Support by Department/Center

In-office computer support for the College of Engineering faculty is provided by your Departmental Support Person (DSP). Services Provided by DSPs:

- Diagnose network problems.
- Diagnose computer problems.
- Install software and/or upgrades.
- Report any problems that cannot be resolved to CAE for further assistance.

Useful Links:

- Engineering Media Services (EMS)
- Library Services

Office/Building/Supplies

Building Hours

The Mechanical Engineering Building is open Monday through Friday from 7:00 a.m. to midnight. The building is closed on Saturday, Sunday, and holidays.

Keys

Steps to Obtain Key for Research Lab

Keys to ISyE research labs are issued to undergraduate and graduate students who have a paid appointment in the ISyE Department. If you need to request a room key, you can do so on <u>KeyLime</u>. After you receive an email confirmation, keys can be picked up in room 3107 ME.

Key Rules

- Do not share this key with others.
- Do not duplicate.

Please return keys "in person" (do not pass on to others).

Steps to Obtain an Access Card to the Mechanical Engineering Building

An access card to the Mechanical Engineering Building can only be issued to a graduate student who has a paid appointment in the ISyE Department and a key to a research lab in the Mechanical Engineering Building. Professors will email the ISyE Administrative Assistant with authorization for a student to be given access to the Mechanical Engineering Building. The student will then be referred to the Department Office to provide their Wiscard for final processing.

Offices and Desk Area

Desk Assignment

Students who are receiving financial support from the ISyE department in the form of a Teaching Assistantship or Research Assistantship will receive office space. For further information, contact the Department Administrator. Please be mindful of your officemates and keep your office area clean and professional.

If you are a teaching assistant and share an office with other graduate students, let them know your office hours and please have them posted at your desk. Some TAs have found it helpful to leave notes at their desk, so if someone is looking, they know where they can find them. When you graduate or no longer use your desk area, you are required to thoroughly clean your desk!

Office Supplies

Please see the Main Office Manager (3107) to inquire about office supplies.

Telephones

Student access to university telephone services is limited to internal university and local calls. University-related long-distance calls (research, teaching, extension) may be made on the telephone of your advisor with his/her permission. When making a local call including calls to other UW-Madison departments or state agencies, first dial "1" and then dial the seven-digit number.

Mother's Room in Mechanical Engineering

There is a lactation/mother's room in Room 2061 in Mechanical Engineering. To get the code for the key, please visit the Department Office (ME 3107).

Gender Neutral Bathrooms

There is a gender-neutral bathroom in Engineering Hall on the 3rd floor in Room 3118. For a list of bathrooms across campus please view this list: <u>Gender Neutral Bathrooms</u>.

Reflection Room

There are many reflection rooms across campus that promote mental and physical health and well-being by providing a peaceful and quiet place for personal reflection and meditation. The closest reflection room to the Mechanical Engineering Building is in the Wisconsin Union on the third floor.

Mail

Any mail received by a graduate student will be delivered to their faculty advisor. Personal mail should be sent to home addresses.

Mailing Address

[Your Name]
University of Wisconsin
Department of Industrial & Systems Engineering
3107 Mechanical Engineering Building
1513 University Ave.
Madison, WI 53706

Outgoing Mail

Personal mail can be taken to the department office (3107 ME) or to the loading dock on the first floor of the ME building (between ME and ERB). In both places there is a U.S. mail and Campus Mail slot for outgoing mail. The nearest drop box for UPS is on the loading dock.

Photocopying

If you are a graduate student who has an assistantship or is doing research in a lab, you are to use your class ID code or your professor's ID code for the copy machine. The photocopy machine/scanner/fax machine is available in the Copy Room next to the department office in 3107 ME. Photocopying on the department copy machine is NOT permitted for personal purposes, including for courses being taken by the student. When using the copy room, please keep the room clean by throwing out paper scraps, staples, etc. Report on user-related problems to the department office. They will call for repairs if necessary.

Copiers for personal use are available in the computer lab in 1263 Mechanical Engineering, or in nearby Union South/Wendt Commons. More information regarding on-campus printing can be found here.

Travel or Purchases for University Business

Before traveling or purchasing supplies for which you expect to be reimbursed or paid directly with university funds, you should meet with Kelly Petersen (kmpetersen2@wisc.edu in ME 3107), the department's Main Office Manager. Due to the complexity and number of rules and regulations, not to mention "illegal" vendors, it is highly recommended that you check with her before you make any arrangements or purchases for the first time. There are many options for payment, and she will be happy to discuss the best choice for you.

Recycling

Recycling is mandatory in Madison. Recyclable containers (aluminum cans, tin/steel, glass, and high-density plastic bottles) should be placed in the waste cans you will see in the hallways. Newspapers should be put in the waste cans labeled "Newspapers." Offices are equipped with wastebaskets for recyclable office paper. See the "UW-Madison Recycling Guide" for more details. Trash cans are emptied once a week. At other times, full containers may be left in the hallway for emptying.

INDEX of WEB RESOURCES

Academic Calendar https://secfac.wisc.edu/academic-calendar/

Associated Students of Madison https://www.asm.wisc.edu/

ASM Bus Pass https://www.asm.wisc.edu/buspass
Badger Support Network https://www.badgersupportnetwork.org

Bursar's Office https://www.bursar.wisc.edu

Campus and Visitor Relations https://info.wisc.edu

Campus Area Housing https://campusareahousing.wisc.edu

Child Care and Family Resources https://occfr.wisc.edu/

Code of Conduct https://www.students.wisc.edu/doso/students/

College of Engineering:

Active Learning Classrooms
 https://wiscel.wisc.edu/wiscel-centers/coe-active-learning-classrooms/

Safety https://safety.engr.wisc.edu

Student Services https://www.engineering.wisc.edu/student-services/

Commencement https://commencement.wisc.edu/

Computer-Aided Engineering https://www.cae.wisc.edu/

Course Search & Enroll https://registrar.wisc.edu/course-search-enroll

Dean of Students Office https://doso.students.wisc.edu

Employee Assistance Office https://hr.wisc.edu/employee-assistance-office/

Engineering Career Services https://ecs.wisc.edu

Engineering Media Services https://video.engr.wisc.edu
Gender and Sexuality Campus Center https://lgbt.wisc.edu/

Gender Discrimination – Know your Rights https://www.equalrights.org/issue/equality-in-schools-universities/sex-

stereotypes-discrimination/

Graduate Guide https://guide.wisc.edu/graduate/

Hostile and Intimidating Behavior

Inclusive Excellence at UW-Madison

Information Technology, UW-Madison

https://diversity.wisc.edu

https://it.wisc.edu

Innovation Days https://innovation.wisc.edu/

International Student Services https://iss.wisc.edu/

ISyE Graduate Programs (Guide) https://guide.wisc.edu/graduate/industrial-systems-engineering/

ISyE Program Course (Canvas) https://canvas.wisc.edu/courses/202619

ISyE Dept. Home page https://www.engineering.wisc.edu/departments/industrial-systems-engineering

Job Center, UW Student https://jobcenter.wisc.edu/

Key Requests (KeyLime) https://keylime.engr.wisc.edu/request

Madison Campus and Downtown Apartments

Madison By Season

Madison News

https://madison.wisc.edu

https://madison.com

Makerspacehttps://making.engr.wisc.eduMcBurney Disability Resource Centerhttps://mcburney.wisc.eduMorgridge Center for Public Servicehttps://morgridge.wisc.edu/

Multicultural Student Center https://msc.wisc.edu/

My UW Homepage https://my.wisc.edu/

New-Student Programs

http://www.newstudent.wisc.edu/
Office of Compliance

https://compliance.wisc.edu/
Office of the Registrar

https://www.registrar.wisc.edu/
Office of Student Financial Aid
Recreation & Wellbeing

https://www.recwell.wisc.edu/

SAFE Nighttime Services https://transportation.wisc.edu/transportation/safeservices.aspx

Satisfactory Academic Progress (grad school)

Software Training for Students

http://www.it.wisc.edu/library/UW-1218

http://www.it.wisc.edu/services/training

https://advising.wisc.edu/facstaff/starfish/

Steuber Prize for Excellence in Writing https://tc.engr.wisc.edu/competitions/

Student Affairs https://students.wisc.edu

Student Health Insurance Plan (SHIP) https://www.uhs.wisc.edu/ship/

Teaching Assistants' Association https://taa-madison.org

TEAM Lab https://teamlab.engr.wisc.edu/

Tenant Resource Center https://www.tenantresourcecenter.org/

Transfer Student Information https://www.admissions.wisc.edu/apply/transfer/

Transportation Services https://transportation.wisc.edu/home.aspx

Travel Policies https://www.wisconsin.edu/travel/
Tuition and Fees https://www.registrar.wisc.edu/tuition

Undergraduate Catalog (Guide) https://guide.wisc.edu/

University Apartments https://www.housing.wisc.edu/apartments/

University Health Services (UHS) https://www.uhs.wisc.edu/

UHS Mental Health Resources https://uhs.wisc.edu/mental-health

University Housing – Apartments https://www.housing.wisc.edu/apartments

University Libraries https://www.library.wisc.edu

University Police Department https://www.uwpd.wisc.edu/
UW KnowledgeBase https://kb.wisc.edu/

UW – Madison Grad School https://www.grad.wisc.edu

UW-Madison BOX System https://uwmadison.account.box.com

UW-Madison Events Calendarhttps://today.wisc.eduUW-Madison Job Centerhttps://jobcenter.wisc.edu

UW School of Business MBA Program https://wsb.wisc.edu/programs-degrees/mba

UW Student Organizations https://win.wisc.edu/organizations

 Veteran Services
 https://veterans.wisc.edu/

 Visit Madison
 https://visitmadison.com

 WisCard
 http://www.wiscard.wisc.edu/

WI Collaboratory for Enhanced Learning (WisCEL) https://wiscel.wisc.edu

Wisconsin Scholarship Hub (WiSH) https://wisc.academicworks.com

Wisconsin Union

Writing Center https://writing.wisc.edu

